# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

**NABL** - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED


Job No.: CTCE/BBMP/HRP/W.No.07/WMM/Gradation/2016-17 05.12.2016

## TEST REPORT ON GRADATION OF WET MIX MACADAM

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of Work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| Sample ID | : | Wet Mix Macadam |
| Technical Reference | : | IS 2386 (part-1)1963 (RA-2011) |
| Date of Testing | : | 05.12.2016 |

Oven Dry Wt (gm): **5000**

| Is Sieve Size in mm | Weight Retained (gm) | Cumulative Weight Retained (gm) | Cumulative % of Retained | Cumulative % of Passing | Spec.Limits As per Morth Table 400-13 |
|---|---|---|---|---|---|
| 53 | 0 | 0 | 0 | 100 | 100 |
| 45 | 125 | 125 | 2.5 | 97.5 | 95-100 |
| 22.4 | 1525 | 1650 | 33.00 | 67.00 | 60-80 |
| 11.2 | 1045 | 2695 | 53.90 | 46.10 | 40-60 |
| 4.75 | 540 | 3235 | 64.70 | 35.30 | 25-40 |
| 2.36 | 495 | 3730 | 74.60 | 25.40 | 15-30 |
| 0.600 | 470 | 4200 | 84.00 | 16.00 | 8-22 |
| 0.075 | 615 | 4815 | 96.30 | 3.70 | 0-8 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

AE(W.)

AE(W.)

*********

Civil-tech Consultants & Engineers
#23/14, 7th Cross 3rd Stage 4th Block,
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 079.


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

**NABL** - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED


Job No.: CTCE/BBMP/HRP/W.No.07/WMM/AIV/2016-17 05.12.2016

## TEST REPORT ON IMPACT VALUE OF AGGREGATE

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of Work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Wet Mix Macadam |
| Technical Reference | : | IS : 2386( Part -4)-1963 (RA-2011) |
| Date of Testing | : | 05.12.2016 |

| Sl No. | Details | Trial No. 1 | Trial No. 2 | Average |
|---|---|---|---|---|
| 1 | Total weight of aggregate sample filling the cylindrical measure = $W_1$ g | 383 | 388 | |
| 2 | Weight of agregate passing 2.36 mm sieve after the test = $W_2$ g | 87 | 85 | |
| 3 | Weight of aggregate retained 2.36 mm sieve after the test = $W_3$ g | 296 | 303 | |
| 4 | Aggregate Impact value = percent fines 100* (W2/W1)% | 22.72 | 21.91 | 22.31 |

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Wet Mix Macadam is 30%

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

AFW

********

Civil-tech Consultants & Engineers
#23/14, 7th Cross 3rd Stage 4th Block,
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 079.

AE(LL)

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

**NABL** - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED


Job No.: CTCE/BBMP/HRP/W.No.07/WMM/Shape.T/2016-17 05.12.2016

## TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of Work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Wet Mix Macadam |
| Technical Reference | : | IS 2386(Part 1) 1963 (RA 2011) |
| Date of Testing | : | 05.12.2016 |

| Sl.No. | Description | Result |
|---|---|---|
| 1 | Flakiness Index | 11.58% |
| 2 | Elongation Index | 13.74% |
| 3 | Combined Flakiness & Elongation Index | 25.32% |

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

**********

Civil-tech Consultants & Engineers
#23/14, 7th Cross 3rd Stage 4th Block,
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 079.

AE (NP)

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/CEMENT/2016-17 Date: 13.12.2016

## TEST REPORT ON CEMENT

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of Work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Cement |
| Sample Received on | : | 12.12.2016 |
| Period of Testing | : | 12.12.2016 to 13.12.2016 |

The results of the tests conducted on the cement sample are as follows:

| Sl. No | Descriptions | Test Method as per IS | Test Result | Requirements as per IS: 8112-2013 |
|---|---|---|---|---|
| 1 | Standard Consistency | IS-4031 (Part -4) 1988 (RA-2014) | 29.00 % | - |
| 2 | a) Initial Setting Time | IS-4031 (Part -5) 1988 (RA-2014) | 165 Minutes | Not Less than 30 Minutes |
| | b) Final Setting Time | IS-4031 (Part -5) 1988 (RA-2014) | 480 Minutes | Not More than 600 Minutes |
| 3 | Soundness by Le Chartlier Method | IS-4031 (Part-3) 1988 (RA-2014) | 1 mm | Not more than 10mm |

*Information is furnished by the Customer/Representative.

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(W)

AE(W)-N-D


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/SAND-Gradation/2016-17 13.12.2016

## TEST REPORT ON SIEVE ANALYSIS OF FINE AGGREGATES

| | |
|---|---|
| * Customer | : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of Work | : Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : Fine Aggregates |
| Technical Reference | : IS : 2386 (Part 1) - 1963 (RA-2011) |
| Sample Received On | : 12.12.2016 |
| Date of Testing | : 13.12.2016 |

Total Wt. of Aggregates in gms = **1000**

| IS Sieve Size in mm | Cumulative Weight Passing in % | Specific Limits as per IS 383-1970 (RA- 2011) | | | |
|---|---|---|---|---|---|
| | | Zone-I | Zone-II | Zone-III | Zone-IV |
| 10 | 100 | 100 | 100 | 100 | 100 |
| 4.75 | 93.80 | 90-100 | 90-100 | 90-100 | 95-100 |
| 2.36 | 78.00 | 60-95 | 75-100 | 85-100 | 95-100 |
| 1.18 | 58.70 | 30-70 | 55-90 | 75-100 | 90-100 |
| 600 Micron | 31.30 | 15-34 | 35-59 | 60-79 | 80-100 |
| 300 Micron | 15.50 | 5-20 | 8-30 | 12-40 | 15-50 |
| 150 Micron | 6.60 | 0-10 | 0-10 | 0-10 | 0-15 |

* Information is furnished by the Customer/Representative

**Remarks :** This sample is under Zone-I specific limits.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

**********

VIDYARANI P.K.
Technical Manager

AE(W)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/AGG/GR/2016-17 13.12.2016

## TEST REPORT ON SIEVE ANALYSIS OF COARSE AGGREGATES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of Work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Coarse Aggregates (40mm) |
| Technical Reference | : | IS : 2386 (Part 1) -1963 (RA-2011) |
| Sample Received on | : | 12.12.2016 |
| Date of Testing | : | 13.12.2016 |

Total Wt. of Aggregates in gms= **5000**

| IS Sieve Size in mm | Cumulative Weight Passing in % | Specific Limits as per IS 383-1970 (RA- 2011) | |
|---|---|---|---|
| | | Graded | Single Sized |
| 80 | 100 | 100 | - |
| 63 | 100 | - | 100 |
| 40 | 97.70 | 95-100 | 85-100 |
| 20 | 36.90 | 30-70 | 0-20 |
| 10 | 13.80 | 10-35 | 0-5 |
| 4.75 | 3.40 | 0-5 | - |

* Information is furnished by the Customer/Representative

**Remarks :** This sample is under graded specific limits.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(QA)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 16.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 16.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 19.12.2016 | 16.01.2017 | 8.247 | 505.3 | 22.46 |
| 2 | 19.12.2016 | 16.01.2017 | 8.364 | 514.2 | 22.85 |
| 3 | 19.12.2016 | 16.01.2017 | 8.452 | 526.9 | 23.42 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(Ry)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 16.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 16.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 19.12.2016 | 16.01.2017 | 8.163 | 483.5 | 21.49 |
| 2 | 19.12.2016 | 16.01.2017 | 8.295 | 499.8 | 22.21 |
| 3 | 19.12.2016 | 16.01.2017 | 8.347 | 510.4 | 22.68 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(HRP)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 18.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 18.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 21.12.2016 | 18.01.2017 | 8.154 | 496.5 | 22.07 |
| 2 | 21.12.2016 | 18.01.2017 | 8.263 | 506.7 | 22.52 |
| 3 | 21.12.2016 | 18.01.2017 | 8.387 | 531.2 | 23.61 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(HRP)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 18.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 18.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 21.12.2016 | 18.01.2017 | 8.354 | 530.6 | 23.58 |
| 2 | 21.12.2016 | 18.01.2017 | 8.158 | 505.3 | 22.46 |
| 3 | 21.12.2016 | 18.01.2017 | 8.297 | 522.7 | 23.23 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(HRP)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 18.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 18.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 21.12.2016 | 18.01.2017 | 8.247 | 491.5 | 21.84 |
| 2 | 21.12.2016 | 18.01.2017 | 8.396 | 513.2 | 22.81 |
| 3 | 21.12.2016 | 18.01.2017 | 8.452 | 523.7 | 23.28 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 21.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 21.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 24.12.2016 | 21.01.2017 | 8.345 | 496.4 | 22.06 |
| 2 | 24.12.2016 | 21.01.2017 | 8.287 | 485.2 | 21.56 |
| 3 | 24.12.2016 | 21.01.2017 | 8.412 | 512.7 | 22.79 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(W7)

AE(W7)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 21.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 21.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 24.12.2016 | 21.01.2017 | 8.184 | 504.8 | 22.44 |
| 2 | 24.12.2016 | 21.01.2017 | 8.263 | 516.3 | 22.95 |
| 3 | 24.12.2016 | 21.01.2017 | 8.392 | 527.4 | 23.44 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

VIDYARANI P.K.
Technical Manager

AE(W2)

AE(W2)


#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/HRP/W.No.07/CSR-12/217b/Cube/2016-17 21.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Mr. H.R. Pratap,** #16, 1st Main, Munikondappa Layout, Nagasandra (P), Bangalore – 73. |
| * Name of the work | : | Road widening and improvements to roads from Mariyannapalya to coffee board layout in Ward No.07, Byatarayanapura, BBMP, Bangalore. |
| * Reference | : | BBMP/EE/BTP/WO/112/2016-17 Dated: 23.08.2016 |
| * Sample ID | : | Road Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 21.01.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 24.12.2016 | 21.01.2017 | 8.367 | 508.2 | 22.59 |
| 2 | 24.12.2016 | 21.01.2017 | 8.452 | 516.9 | 22.97 |
| 3 | 24.12.2016 | 21.01.2017 | 8.296 | 490.3 | 21.79 |

*Information is furnished by the Customer/Representative.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

AE'W

*********

VIDYARANI P.K.
Technical Manager

AE (W)

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com